

CLAIMS

1. A substrate for an electronic component, comprising:
an insulating base; and
a flexible circuit board mounted on said insulating
5 base, said flexible circuit board being a synthetic resin
film provided thereon with terminal patterns and a
conductor pattern whose surface is slidingly contacted with
a slider;
wherein said insulating base is a synthetic resin
10 molded piece, and said flexible circuit board is insert-
molded to said insulating base.
2. A substrate for an electronic component according to
claim 1, wherein a collector plate provided with a tubular
projection is insert-molded to said insulating base in such
15 a way that said tubular projection is positioned in
through-holes respectively provided in said insulating base
and said flexible circuit board.
3. A substrate for an electronic component according to
claim 1 or 2, wherein said flexible circuit board is
20 mounted on said insulating base by insert molding in a
folded state so that a surface of said flexible circuit
board is exposed on upper and lower sides of said
insulating base.
4. A substrate for an electronic component according to
25 claim 1, 2 or 3, wherein said insulating base is provided
with a retaining portion for firmly securing said flexible
circuit board to said insulating base.
5. A substrate for an electronic component according to

claim 1, 2, 3 or 4, wherein said conductor pattern is formed from a metal thin film deposited by physical vapor deposition or chemical vapor deposition.

6. A substrate for an electronic component according to
5 claim 1, further comprising:

terminal plates mounted on an end portion of said insulating base in electrical connection with said terminal patterns provided on said flexible circuit board.

7. A substrate for an electronic component according to
10 claim 6, wherein said insulating base is provided with a retaining portion for firmly securing said flexible circuit board to said insulating base.

8. A substrate for an electronic component according to
15 claim 6 or 7, wherein said terminal plates are insert-molded to said insulating base.

9. A substrate for an electronic component according to claim 6, 7 or 8, wherein a collector plate is insert-molded to said insulating base.

10. A substrate for an electronic component according to
20 claim 6, 7, 8 or 9, wherein said conductor pattern is formed from a metal thin film deposited by physical vapor deposition or chemical vapor deposition.

11. A method of producing an electronic component substrate, comprising:

25 preparing a flexible circuit board comprising a synthetic resin film provided thereon with a conductor pattern, a surface of which is slidably contacted with a slider, and terminal patterns connected to said conductor

pattern, and further preparing a mold having a cavity with a shape that corresponds to an external shape of said electronic component substrate to be produced;

5 accommodating said flexible circuit board in the cavity of said mold in such a manner that a surface of said flexible circuit board where the conductor pattern is provided is abutted against one inner surface of the cavity, and a portion of said flexible circuit board on a side thereof where the terminal patterns are provided is folded
10 over toward the other inner surface of the cavity;

filling a molten molding resin into said cavity, thereby bringing the folded portion of said flexible circuit board into close contact with a cavity wall area extending from an upper surface to a lower surface of the
15 cavity along one outer peripheral side surface thereof; and

removing the mold after the filled molding resin has been solidified, whereby the flexible circuit board is mounted on an insulating base made of the molding resin in such a way that a portion of said flexible circuit board
20 where the conductor pattern is provided is exposed on an upper side of said insulating base, and a portion of said flexible circuit board on the side thereof where the terminal patterns are provided is exposed in a folded state over an area extending from one outer peripheral side to a
25 lower side of said insulating base.

12. A method of producing an electronic component substrate according to claim 11, wherein a collector plate made of a metal sheet is accommodated in the cavity of said

mold at the same time as said flexible circuit board is accommodated in said cavity, thereby embedding the collector plate in the insulating base made of said molding resin.

- 5 13. A method of producing an electronic component substrate, comprising:

- preparing a flexible circuit board comprising a synthetic resin film provided thereon with a conductor pattern, a surface of which is slidably contacted with a slider, and terminal patterns connected to said conductor pattern, and further preparing terminal plates made of metal sheets and a mold having a cavity with a shape that corresponds to an external shape of the electronic component substrate to be produced;
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- 15 accommodating said flexible circuit board in the cavity of said mold in such a manner that a surface of said flexible circuit board where the conductor pattern is provided is abutted against one inner surface of the cavity;
- 20 filling a molten molding resin into said cavity, and removing the mold after the filled molding resin has been solidified, whereby the flexible circuit board is mounted on an insulating base made of the molding resin in such a way that the conductor pattern and the terminal patterns
- 25 are exposed; and

mounting the terminal plates on an end portion of said insulating base in electrical connection with the terminal patterns provided on said flexible circuit board.

14. A method of producing an electronic component substrate, comprising:

preparing a flexible circuit board comprising a synthetic resin film provided thereon with a conductor pattern, a surface of which is slidingly contacted with a slider, and terminal patterns connected to the conductor pattern, and further preparing terminal plates made of metal sheets and a mold having a cavity with a shape that corresponds to an external shape of the electronic component substrate to be produced;

accommodating said flexible circuit board and said terminal plates in the cavity of said mold in such a manner that a surface of said flexible circuit board where the conductor pattern is provided is abutted against one inner surface of the cavity, and at the same time, the terminal plates are partially abutted against or opposed to the terminal patterns on said flexible circuit board; and

filling a molten molding resin into said cavity, and removing the mold after the filled molding resin has been solidified, whereby the flexible circuit board is mounted on an insulating base made of the molding resin in such a way that the conductor pattern and the terminal patterns are exposed, and at the same time, the terminal plates are mounted on an end portion of the insulating base in electrical connection with the terminal patterns provided on said flexible circuit board.

15. A method of producing an electronic component substrate according to claim 13 or 14, wherein a collector

plate made of a metal sheet is accommodated in the cavity of said mold at the same time as said flexible circuit board is accommodated in said cavity, thereby embedding the collector plate in the insulating base made of said molding
5 resin.